3/22/2021

Comments on Lower Ley Creek Remedial Design Work Plan (RDWP) submitted February 15, 2021

USEPA General Comments

1. Change all references of the "PDI Report (Arcadis 2020)" to "PDI Data Summary Report (Arcadis 2020).
2. **Section 7 Remedial Design Project Schedule**: Considering the excavated soils and sediments will be processed in a way that is dependent upon the disposal location, it is important to secure the executed Local Disposal Agreement as early as possible during the design. Following discussions with Arcadis in Summer 2020, EPA agreed to delay approval of the Local Disposal Assessment (until approval of the RDWP) in order to combine the Local Disposal Agreement with the Preliminary (30%) Remedial Design at the request of the Respondents. We request that the Respondents offer their best effort to submit these documents together. If not attainable, the executed Local Disposal Agreement must be provided with the Intermediate (60%) RD.

USEPA Specific Comments

1. **Note at the bottom of the signature page:** After revisions to this RDWP, the final workplan will be a publicly available document
2. **Figure 1-1:** Please add Syracuse and Salina to the map on Figure 1-1. It is not clear where the map is located from what is labeled in the figure.
3. **Section 1.1 Site Background and History:** No history of the contamination is presented. Suggested text:

   There are several upland sources that have contributed contamination to Ley Creek. The most significant of these sources are the General Motors Inland Fisher Guide (IFG) Facility/Ley Creek Deferred Media, Ley Creek PCB Dredgings and Salina Landfill subsites.

   Prior to the early 1970s, poor channel conditions and large impermeable areas in the watershed caused extensive flooding of Ley Creek. These flooding events led to the creation of the Ley Creek Drainage District. Beginning in 1970, the Onondaga County Department of Drainage and Sanitation widened, deepened and rerouted the Creek through the Town of Salina Landfill. Dredged materials were spread along the banks of Ley Creek in addition to being disposed of at the Town of Salina Landfill.

4. **Section 1.1.1 Subsite Description, end of last paragraph:** The closed Town of Salina Landfill is a subsite of the Onondaga Lake Site (OU8)
5. **Section 1.1.2 Previous Investigations, bullet 2:** Where was the soil and sediment data collected by NYSDEC in 2010? Is this the data collected in the Old Ley Creek Channel area?
6. **Section 1.1.2 Previous Investigations, last paragraph:** This paragraph does not belong here sequentially. The top of page 4 would be a more appropriate location.
7. **All references to Phase IA Cultural Resource Assessment** (top of page 4 and other locations throughout the text): This is an incorrect reference. It should be "Cultural Resources Survey." (See RD SOW section 1.3 [o])

8. **Section 1.2 Description of Selected Remedy:** The ROD also includes: "A detailed hydrologic analysis will be performed during the design phase to determine the effect of the remedy on stream flow, flooding and dynamics and to identify the appropriate materials and bathymetry for restoration and long-term sustainability." Please add to this section.
9. **Bottom of p.4,** "Because PCBs are collocated with the majority of other COCs, addressing PCB concentrations that exceed the cleanup goal for soils will address risks associated with other soil COCs (primarily metals).": Add reference to the ROD (USEPA 2014).
10. **Section 1.4 Remedial Design Work Plan Objective. Bottom of p.5 last bullet "Descriptions of any applicable permitting requirements and other regulatory requirements for the RA and local disposal, if chosen (see Section 4.4);":** On-site actions must meet the substantive requirements of permits.
11. **Section 2.1.1 Geology and Hydrogeology, last paragraph/sentence**: This sentence is not relevant to LLC. The groundwater contamination that is being addressed is attributable to the Salina Landfill.
12. **Section 2.1.2 Geotechnical Conditions, "To support the RD, in-water and upland geotechnical borings were installed during the 2017 PDI program in areas of anticipated excavation/dredging. The geotechnical borings were specifically placed in areas where deeper removal is proposed and adjacent to existing infrastructure to support the RD process for stability analysis of critical areas and structures."**: This sentence doesn't read well. Please revise.
13. **Section 2.1.3 Infrastructure, Topography, and Bathymetry, second paragraph**: Start paragraph with "A bathymetric survey" (add the word "a").
14. **Section 2.1.3 Infrastructure, Topography, and Bathymetry, last paragraph:** The text says that bathymetry results are presented on Figures 2-1a through 2-1j. It is not clear that these figures show bathymetry data. Was it mis-stated? Is it hidden behind the target removal depth? Please update figures.
15. **Section 2.1.4 Sediment Thickness and Stratigraphy**: add reference for where the probing data can be found.
16. **Section 2.1.5 Hydrodynamic Modeling**: Delete first paragraph and replace with "Ley Creek is classified as a Class "C" waterbody pursuant to Section 701.8 of Title 6 of the New York Codes, Rules and Regulations (6 NYCRR § 701.8) from the mouth of the creek to a point approximately 1.3 miles upstream and a Class "B" waterbody pursuant to 6 NYCRR § 701.7 upstream of that point. The Lower Ley Creek Subsite is comprised of both Class C and Class B waters."
17. **Table 2-1 Ley Creek Stream Flow Characteristics, Notes**: The notes say that these values are based on data from 2015 and 1977 respectively. How can the data be based on one date if it is representing a period between 1973 and 2020? Please check and update.
18. **Section 2.1.5 Hydrodynamic Modeling, last paragraph, last sentence**: How is 'as needed' determined?" Without hydrologic analysis, can the effect of the remedy on stream flow, flooding and dynamics be determined and can the appropriate materials and bathymetry for restoration and long-term sustainability be identified?
    The ROD bullet describing the selected remedy (p.41 of the ROD) states: "A detailed hydrologic analysis will be performed during the design phase to determine the effect of the remedy on stream flow, flooding and dynamics and to identify the appropriate materials and bathymetry for restoration and long-term sustainability."

Please revise.

19. **Section 2.1.6 Wetland Delineation and Habitat Characterization, third paragraph**: There is a reference to Appendix D, Figures D1-D3. Is this correct? Please check and specify in text what these figures show. In what was submitted, only D-1 figures exist, and they don't show bank characterization.
20. **Section 4.2 Phase IA Cultural Resource *Survey*, second paragraph**: In the even that cultural resources are identified, will a Phase 2 Cultural Resource Survey be performed. Please specify.
21. **Section 4.2.1**:
    a. **Bullet 2**: replace "bank" with "banks"
    b. **Bullet 5**: add dates to "Prior construction of the former City of Syracuse Landfill areas"
    c. **Last sentence of last paragraph:** As written, this is confusing. Figures 2-1a through 2-1j show work proposed by this RDWP and areas of known prior disturbance. Figures 4-1a through 4-1h show work proposed by this RDWP, areas of known prior disturbance, **and** APE.
    d. **Last sentence of last paragraph:** at the end of the paragraph, please add "Work proposed by this RDWP for the Subsite, areas of known prior disturbance, and areas identified as APE are shown on Figures 4-1a through 4-1h."
22. **Section 4.2.2 Cultural Resource Assessment**: Change to Cultural Resource Survey
    a. **Second sentence**: please add "(shown on figures 4-1a through 4-1h)." after "constitute the project's APE."
    b. **Last sentence**: strike "The APE areas are shown on figures 4-1a through 4-1h."
    c. **First bullet**: What is the relevance of soil data analysis to cultural resources?
    d. **Last paragraph**: Change "Onondaga Tribal representatives" to "Onondaga Nation representatives"
23. **Section 4.2.2.1 Documentary Research…:**
    a. There is reference to an Onondaga [Nation] Office.
        i. Is there such an office?
        ii. If so, please change the name replacing "Tribal" with "Nation"
    b. **Third bullet**: "pre-contact" and "historic" should not be capitalized
    c. **Paragraph after bullets**:
        i. Spell out "Natural Resources Conservation Service"
        ii. "web" and "web soil survey" should not be capitalized
24. **Bottom of page 16**:
    a. "historic" should not be capitalized
25. **Page 17, 3rd paragraph**: The areas of the banks that are to be addressed are all areas where spoils were placed. There could be archaeological resources present, but they would be beneath the spoils (except in areas that were used for refuse disposal).
26. **Bottom of page 17**: It is unlikely that removing the spoils will cause adverse impacts to historic properties. Please adjust text.
27. **Section 4.2.2.3 last paragraph**: Change "portions the APE" to "portions *of* the APE"
28. **Section 4.3 Access Requirements, first bullet and Figure 4-2:** Figure 4-2 also includes a few parcels not requiring access (e.g. 086.-02-14.1 PARADIS JOHN 3.15 ACRES) Please explain and/or remove from figure 4-2.

29. **Section 4.3 Access Requirements, last paragraph**: Without samples, what are the remediation plans for this location?
    There are some sample locations in these proposed removal areas. Are the samples taken outside of the Solvents and Petroleum Services properties? Are there samples that should have been collected in the vicinity of these areas?
30. **Table 5-1:** The first two line-items are categorized as "National Grid gas line". Why are they separated?
31. **Section 5.2.2. Post Removal Sampling, first sentence:** Please revise language to clarify in the text - something to the effect of "Post-excavation sampling will be performed in select areas where removal limits are not fully defined by a sample location with results less than the cleanup goals. These areas may be undefined based on horizontal or vertical sample delineation."
32. **Section 5.2.2 Post-Removal Sampling, first bullet**: remove extra "s" at the end of the bullet.
33. **Section 5.4 Final Transport and Disposal of Impacted Material**:
    a. **Second bullet**: add, "The LDF will be identified as noted below."
    b. **P.26 Second Paragraph**: after "Federal Water Pollution Control Act (USEPA 2020)", add ", which were clarified in the Clean Water Act Section 401 Certification Rule"
34. **Section 5.5.1 Soil Backfill**: For clean fill, need to also follow January 2020 Guidelines for Sampling and Analysis of PFAS Under NYSDEC's Part 375 Remedial Programs.
    a. **Top of p.27**: change "Except for removal areas SOIL-G" to "Except for removal *area* SOIL-G" (remove s in areas)
35. **Section 5.7.2 Air Monitoring**: delete last sentence "Because volatile ... VOCs are not needed". The ROD states that VOCs will be measured. Whether VOCs are COCs is irrelevant. If they are present, they may volatilize and pose a human health risk. Therefore, monitoring should be conducted.
36. **Section 7 Remedial Design Project Schedule, third paragraph**:
    a. change "Upper Ley Creek" to "the Ley Creek Deferred Media Subsite, upstream of Lower Ley Creek". Carry throughout document.
    b. We would ideally like to do construction of Ley Creek Deferred Media (formerly known as Upper Ley Creek) and Lower Ley Creek in concert (i.e. soil remediation in both subsites concurrently, then sediment remediation moving downstream). Please revise. Ley Creek Deferred Media will not have to be completed before remedial construction begins in Lower Ley Creek.
37. **Section 7 Remedial Design Project Schedule, fourth paragraph**:
    a. While all the Respondents may not end up being Settling Defendants, the approach for contracting, construction, and operation and maintenance of the remedial action should be the same regardless which PRPs comprise the performing parties.
38. **Section 8 References**:
    a. Define CHA
    b. Define AIA (Martin, Elizabeth, Associate AIA...)
    c. USEPA 2020: Add link to reference: https://www.epa.gov/cwa-401/final-rule-clean-water-act-section-401-certification-rule
39. **Figure 1-1**: Add boundaries of the Lower Ley Creek subsite to the figure

40. **Figure 1-2:** add symbology for both swale areas (red-orange dashed line and lime green dashed line) to legend
41. **Figures:** Change all text referring to Cultural Resource Assessment to Cultural Resource Survey
42. **Figure 4 series:** The Figure 4 series is confusing in that most of the APE include 2' removal, but without being able to see the outline of the 2' removal, it is assumed that the blue hatching is part of the APE. Please make the removal areas underneath the landfills and formerly disturbed area visible so that it is easy to see the difference between removal areas outside of the APE and removal areas inside.
43. **Appendix A, Baseline Monitoring Plan, Attachment 1:**
    a. The existing QAPP that will be amended will expire this year, therefore it is suggested that a new QAPP be prepared that covers all the work that will be performed under the Remedial Design and subsequent for the site. This will ensure that the latest procedures and methods are applied to the investigation and remediation work.
    b. What does "Preliminary" in the title mean? Will final SOPs be submitted in the next deliverable?
    c. **Section 1.2** describes that some of the remediation work will involve removal of contaminated soil at the site; however, the proposed investigation only involves water and air sampling. Please clarify.
    d. **Section 1.3 Baseline Monitoring Program Overview, first paragraph:** This is true for sediments, but not true for soils. Please split the statement as in the RDWP (p. 4).
    e. **Section 3 Water Column Sampling Procedures, Bullet 6**: If the water is 4' deep, it may be difficult to "dip" to 0.5 times the total depth. Consider adding the use of a peristaltic pump and tubing which could be attached to the measurement rod or a weighted line.
44. **Appendix A, Baseline Monitoring Plan, Figure 1-1:**
    a. Add the boundary between Salina and Syracuse.
    b. Add symbology of both swale areas (red dashed line and lime dashed line) to the legend
45. **Appendix C:** Add the word ROD before the table number/name in all Appendix C tables

NYSDEC Comments

1. **Section 2.1.1 Geology and Hydrogeology, Page 7**: The text states "Groundwater contamination is not being addressed as part of this action, and instead is being addressed as part of the Town of Salina Landfill subsite.". The text doesn't appear to be relevant to this document. Please clarify or remove the text.
2. **Section 4.2.1 Areas Previously Disturbed, Page 15:** The text states "It is assumed, at a minimum, the locations of known prior disturbance are not archaeologically sensitivity due to the extent of prior disturbance, and it is concluded that planned construction activities in these areas will not impact any cultural resources within the footprint of prior disturbance, and as such these areas are not included in the project's Area of Potential Effect (APE; discussed below) and additional cultural resource investigations are not warranted in these known prior disturbance areas. Work proposed by this RDWP for the Subsite, and areas of known prior disturbance outside of the APE, are shown on Figures 2-1a through 2-1j.".

Does this indicate that there wouldn't be any cultural resource investigations in areas where dredge spoils were placed and will be removed under the selected remedy, regardless of what is known/suspected about the potential cultural sensitivity of that area?

3. **Section 4.3 Access Requirements, page 19:** Will the property owner Solvents and Petroleum Services allow for excavation and backfill of the proposed areas? If there is a need to gain access NYSDEC counsel will assist.
4. **Section 4.4 Permit Equivalency Package page 19:** Construction water and decanted water that will discharge would require a NYSDEC permit.
5. **Section 5.1 Site Preparation, page 21:** The text state "Cleared Vegetation will either be disposed of locally, stockpiled for habitat reconstruction, or mulched and used onsite." Invasive vegetation needs to be properly disposed of to prevent spreading.
6. **Section 5.2.1 Offset Evaluation, Page 24:** The text states "The design will use the assessment to evaluate the extent of restricted areas and potential modifications to the remedy that can be implemented to eliminate exposure risks if complete removal of impacted material in these areas cannot be performed." The text needs to state that these areas would need to be addressed by institutional controls (e.g., environmental easement) and discussed in the Site Management Plan.
7. **Section 5.7.2 Air Monitoring, page 30:** PCBs should be used for air monitoring as well as the baseline monitoring in Appendix A. The ROD states there will be VOC monitoring will that be required?

Onondaga Nation Comments

1. The RDWP proposes eliminating an area designated as SOIL-A from remediation, noting that PCBs are not elevated in this location, exceedances of other metals are "not substantially" above screening levels, the site partially overlaps a landfill which may have its own contaminant issues, and the site is difficult to access. The Nation does not view any of these reasons as compelling.

   The absence of PCB contamination in and of itself is not decisive. The ROD focused on PCBs, because these were the most ubiquitous contaminants and because other contaminants tended to be "collocated" with PCBs. The ROD states that remediation of PCBs is expected to also address other contaminants, not that remediation of PCBs alone will provide a complete remedy. As acknowledged in the RDWP, lead, mercury, chromium, and other metals on SOIL-A exceeded screening levels. If these levels were chosen to protect human health and the environment, exceedances – even "non-substantial" ones – should be enough to trigger remediation. If the Potentially Responsible Parties (PRPs) believe that these screening levels are overly stringent or unnecessary, they should propose and justify alternative standards to trigger remediation and demonstrate that contaminant levels in SOIL-A do not exceed those alternative standards.
2. The potential presence of landfill-related contaminants in SOIL-A similarly does not excuse the PRPs from remedial obligations. If the concern is that additional excavation in this area will disrupt prior cleanup work, the PRPs should make that clear and provide documentation of this potential problem.

3. Additional support is needed to justify the off-hand claim that Area SOIL-A is difficult to access. Other areas to be remediated, including SOIL-B and SED-A, are quite close to SOIL-A. If these sites are accessible, it is difficult to see why SOIL-A would be considered either isolated or inaccessible. Provide more information to assess this claim.
4. The RDWP proposes to create a two-foot buffer around some structures within the areas to be remediated, but a fifteen-foot buffer around buried utility lines (pp. 22-24). Since the two-foot buffer is presumably sufficient to ensure the structural integrity of bridges, abutments, and railroad embankments, it is unclear why such a large buffer is proposed for utility lines. Some explanation should be provided.
5. **Section 4.1**: the RDWP describes additional assessment of areas surrounding "historical sample results" to determine if these areas were "previously addressed as part of the Town's remedial action" for the Town of Salina Landfill (p. 14). If the purpose of this assessment is to determine whether the contaminated areas were remediated after the historical sampling was done and the documented exceedances have now been removed, this seems sensible. However, there is some overlap between the dates of the initial Ley Creek sampling (2009-2011) and the Salina Town Landfill remediation (2010-2011), meaning that the historical samples at issue could have been taken during or after the landfill remediation. The RDWP should clarify this timing and, if historical sampling occurred during or after the landfill remediation, explain why a geographic overlap between exceedances and the landfill footprint is important.
6. **Section 4.2:** While the cultural assessment plans are preliminary, they raise several questions and omit important steps. First and foremost, the CERCLA consultation process cannot substitute for formal consultation with the appropriate Nation office for purposes of Section 106 of the National Historic Preservation Act. The PRPs and their consultant must ensure that Anthony Gonyea, the Onondaga Nation's Section 106 representative, is consulted directly on this matter. Mr. Gonyea prefers reviewing hard copies of the relevant documents, which can be sent to him at:

   Anthony Gonyea
   Administration Building
   4040 Route 11
   Onondaga Nation
   via Nedrow, NY 13120

   In addition, electronic copies of relevant documents should be forwarded to me (alma.lowry@gmail.com) and to Joe Health (jheath1946@gmail.com).

   Ley Creek falls within the historic territory of the Onondaga Nation. The Nation's ancestors have lived and died in this area since time immemorial. Waterways, like Ley Creek, were central to the traditional lifeways of the Nation and areas along the historic alignment of waterways are particularly sensitive in their potential to house both cultural artifacts and burial sites. Because this site includes both the current and former Ley Creek Channel, special care must be taken in assessing this site.
7. The RDWP proposes excluding from pre-construction cultural assessment any areas that show evidence of prior disturbance, including prior excavation, construction, installation of utility lines, or landfilling/depositing of dredged spoils. These broad exclusions could improperly limit the geographic scope of assessment for several reasons.

First, the assessment of prior disturbance, as described in the RDWP, does not appear to consider the vertical extent of prior disturbance compared to the proposed depth of remedial excavation. According to the RDWP, the average depth of soil excavation on this subsite will be 3-5 feet, but may reach 14 feet below ground surface in some locations. Areas of deep excavation may extend far below any prior disturbance and even the average excavation depth may be below the level of prior disturbance. If the PRPs are allowed to exclude areas of prior disturbance from the cultural assessment, they must consider both the vertical and horizontal extent of the prior disturbance. No exclusions should be permitted without evidence that any prior disturbance extends below the planned excavation depth at a given location.

The Onondaga Nation believes that the mere fact of prior disturbance should not exclude areas from assessment. In particular, dredged spoils deposit areas should be part of any on-the-ground cultural assessment. As documented in the 1970 and 1971 Design Documents provided in Appendix B, the historic dredging of Ley Creek deepened, widened, and, in some spots, moved the channel. As a result, the dredging removed large sections of Creek bank (Appendix B, 1970 Bear Trap/Ley Creek Contract No. 1, Sheets 3, 4, and 7; Appendix B,1971 Bear Trap/Ley Creek Contract No. 2, Sheets 4, 6, 7, and 8) or rerouted portions of the Creek entirely, cutting into areas adjacent to the original waterway (Appendix B, 1970 Bear Trap/Ley Creek Contract No. 1, Sheets 5 and 6). Because the dredged spoils included large swaths of the historic Creek banks and adjacent lands, they may well have contained cultural artifacts, or full or partial sets of human remains. This work was done long before the Native American Graves Protection and Repatriation Act (NAGPRA) was adopted in 1990, meaning that the excavated material was very unlikely to have been screened for artifacts or remains. These cultural resources may have been transferred with and remain buried in dredged spoils, making pre-excavation screening of these areas critical.

8. At minimum, the PRPs should commit to having an archaeologist or other consultant with particular expertise in Onondaga-specific artifacts and in identifying human remains on site as a monitor during all excavation activities. An experienced on-site monitor will be able to identify soil types typically associated with cultural artifacts, recognize cultural artifacts or partial remains that may be encountered unexpectedly within excavations or excavated materials, and ensure that the proper steps are followed if an unexpected discovery is made. As consultation moves forward, the Nation can provide more detail on the expertise/experience necessary to fulfill this role.